

# SEQUENCE LISTING

<110> Allen, Stephen  
Heppard, Elmer  
Sakai, Hajime  
Weng, Zude  
Helentjaris, Tim  
Macool, Daniel  
Miao, Guo-Hua

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Glu Phe Lys Ile Leu Lys Leu Phe Ile His Pro His Ile Ile Arg Leu
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Tyr Glu Val Ile Tyr Thr Pro Thr Asp Ile Tyr Val Val Met Glu Tyr
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Cys Lys Tyr Gly Glu Leu Phe Asp Tyr Ile Val Glu Lys Gly Arg Leu
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 <212> PRT  
 <213> Oryza sativa

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 35 40 45  
 Leu Ser Glu Val Asp Ile Leu Arg Arg Ile Arg His Pro Asn Val Ile  
 50 55 60  
 Ala Leu His Glu Ser Ile Arg Asp Gly Gly Lys Ile Tyr Leu Val Leu  
 65 70 75 80  
 Glu Tyr Cys Arg Gly Gly Asp Leu His Ser Tyr Leu Gln Gln His Lys  
 85 90 95  
 Arg Val Ser Glu Thr Val Ala Lys His Phe Ile Gln Gln Leu Ala Ser  
 100 105 110  
 Gly Leu Gln Met Leu Arg Glu Asn Asn Val Val His Arg Asp Leu Lys  
 115 120 125  
 Thr Thr Glu Ile Leu Leu Ile Ala Asn Asn Glu Asn Leu Pro Leu Lys  
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<212> PRT
<213> Glycine max

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His Ala Arg Asn Leu Lys Thr Gly Gln His Val Ala Met Lys Val Val
      35                      40                      45

Gly Lys Glu Lys Val Ile Lys Val Gly Met Met Glu Gln Val Lys Arg
      50                      55                      60

Glu Ile Ser Val Met Lys Met Val Lys His Pro Asn Ile Val Glu Leu
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His Glu Val Met Ala Ser Lys Ser Lys Ile Tyr Ile Ser Ile Glu Leu
      85                      90                      95

Val Arg Gly Gly Glu Leu Phe Asn Lys Val Ser Lys Gly Arg Leu Lys
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Glu Asp Leu Ala Arg Leu Tyr Phe Gln Gln Leu Ile Ser Ala Val Asp
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Ser	Leu	Asp	Ala	Arg	Lys	Leu	Val	Thr	Lys	Leu	Leu	Asp	Pro	Asn	Pro		
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Glu	Glu	Lys	Ile	Glu	Asn	Gln	Glu	Thr	Met	Asn	Ala	Phe	His	Ile	Ile		
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Ser	Arg	Leu	Glu	Glu	Val	Ala	Lys	Ala	Gly	Lys	Phe	Asp	Val	Lys	Ser		
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Lys	Leu	Ala	Ile	Ala	Ala	Asp	Ile	Tyr	Ala	Val	Thr	Pro	Ser	Phe	Met		
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Val	Val	Glu	Val	Lys	Lys	Asp	Asn	Gly	Asp	Thr	Leu	Glu	Tyr	Asn	Gln		
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Phe	Cys	Ser	Lys	Gln	Leu	Arg	Pro	Ala	Leu	Lys	Asp	Ile	Phe	Trp	Asn		
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<211> 2123

<212> DNA  
 <213> Glycine max

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 <212> PRT  
 <213> Glycine max

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 Val Lys Ile Ala Glu His Val Leu Thr Gly His Lys Val Ala Ile Lys  
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 Arg Arg Glu Ile Lys Ile Leu Arg Leu Phe Met His Pro His Ile Ile

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Glu	Tyr	Val	Lys	Ser	Gly	Glu	Leu	Phe	Asp	Tyr	Ile	Val	Glu	Lys	Gly
			100					105					110		
Arg	Leu	Gln	Glu	Asp	Glu	Ala	Arg	Asn	Phe	Phe	Gln	Gln	Ile	Ile	Ser
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Gly	Val	Glu	Tyr	Cys	His	Arg	Asn	Met	Val	Val	His	Arg	Asp	Leu	Lys
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Pro	Glu	Asn	Leu	Leu	Leu	Asp	Ser	Lys	Cys	Asn	Val	Lys	Ile	Ala	Asp
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Phe	Gly	Leu	Ser	Asn	Ile	Met	Arg	Asp	Gly	His	Phe	Leu	Lys	Thr	Ser
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Cys	Gly	Ser	Pro	Asn	Tyr	Ala	Ala	Pro	Glu	Val	Ile	Ser	Gly	Lys	Leu
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Tyr	Ala	Gly	Pro	Glu	Val	Asp	Val	Trp	Ser	Cys	Gly	Val	Ile	Leu	Tyr
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Ala	Leu	Leu	Cys	Gly	Thr	Leu	Pro	Phe	Asp	Asp	Glu	Asn	Ile	Pro	Asn
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Leu	Phe	Lys	Lys	Ile	Lys	Gly	Gly	Ile	Tyr	Thr	Leu	Pro	Ser	His	Leu
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Ser	Pro	Gly	Ala	Arg	Asp	Leu	Ile	Pro	Gly	Met	Leu	Val	Val	Asp	Pro
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Met	Arg	Arg	Met	Thr	Ile	Pro	Glu	Ile	Arg	Gln	His	Pro	Trp	Phe	Gln
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Ala	Arg	Leu	Pro	Arg	Tyr	Leu	Ala	Val	Pro	Pro	Pro	Asp	Thr	Met	Gln
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Gln	Ala	Lys	Lys	Ile	Asp	Glu	Glu	Ile	Leu	Gln	Glu	Val	Val	Lys	Met
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Gly	Phe	Asp	Arg	Asn	Gln	Leu	Val	Glu	Ser	Leu	Gly	Asn	Arg	Ile	Gln
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Asn	Glu	Gly	Thr	Val	Ala	Tyr	Tyr	Leu	Leu	Leu	Asp	Asn	Arg	Phe	Arg
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Val	Ser	Ser	Gly	Tyr	Leu	Gly	Ala	Glu	Phe	Gln	Glu	Thr	Met	Asp	Ser
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		355					360					365			
Asn	Arg	Phe	Pro	Gly	Tyr	Met	Glu	Tyr	Pro	Gly	Val	Gly	Ser	Arg	Gln
	370					375					380				
Gln	Phe	Pro	Val	Glu	Arg	Lys	Trp	Ala	Leu	Gly	Leu	Gln	Ser	Arg	Ala

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His Pro Arg Glu Ile Met Thr Glu Val Leu Lys Ala Leu Gln Glu Leu						
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Asn Val Cys Trp Lys Lys Ile Gly His Tyr Asn Met Lys Cys Arg Trp						
		420		425		430
Val Ala Gly Ile Pro Gly His His Glu Gly Met Val Asn Asn Asn Val						
		435		440		445
His Ser Asn His Tyr Phe Gly Asp Asp Ser Asn Ile Ile Glu Asn Asp						
		450		455		460
Ala Val Ser Thr Ser Asn Val Val Lys Phe Glu Val Gln Leu Tyr Lys						
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Thr Arg Glu Glu Lys Tyr Leu Leu Asp Leu Gln Arg Val Gln Gly Pro						
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Val Leu

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 <211> 2040  
 <212> DNA  
 <213> Glycine max

<400> 13

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<212> PRT
<213> Glycine max

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Ala Lys Val Tyr His Ala Arg His Leu Lys Thr Gly Lys Ser Val Ala
          35              40              45

Met Lys Val Val Gly Lys Glu Lys Val Val Lys Val Gly Met Met Glu
          50              55              60

Gln Ile Lys Arg Glu Ile Ser Ala Met Asn Met Val Lys His Pro Asn
  65              70              75              80

Ile Val Gln Leu His Glu Val Met Ala Ser Lys Ser Lys Ile Tyr Ile
          85              90              95

Ala Met Glu Leu Val Arg Gly Gly Glu Leu Phe Asn Lys Ile Ala Arg
          100              105              110

Gly Arg Leu Arg Glu Glu Met Ala Arg Leu Tyr Phe Gln Gln Leu Ile
          115              120              125

Ser Ala Val Asp Phe Cys His Ser Arg Gly Val Tyr His Arg Asp Leu
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Lys Pro Glu Asn Leu Leu Leu Asp Asp Asp Gly Asn Leu Lys Val Thr
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Asp Phe Gly Leu Ser Thr Phe Ser Glu His Leu Arg His Asp Gly Leu
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Leu His Thr Thr Cys Gly Thr Pro Ala Tyr Val Ala Pro Glu Val Ile
          180              185              190

Gly Lys Arg Gly Tyr Asp Gly Ala Lys Ala Asp Ile Trp Ser Cys Gly
          195              200              205

Val Ile Leu Tyr Val Leu Leu Ala Gly Phe Leu Pro Phe Gln Asp Asp
          210              215              220

Asn Leu Val Ala Leu Tyr Lys Lys Ile Tyr Arg Gly Asp Phe Lys Cys
          225              230              235              240

Pro Pro Trp Phe Ser Ser Glu Ala Arg Arg Leu Ile Thr Lys Leu Leu
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 Ser Thr Thr Met Asn Ala Phe His Ile Ile Ser Leu Ser Glu Gly Phe  
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 Ala Ala Asp Leu Tyr Ala Val Thr Pro Ser Phe Leu Val Val Glu Val  
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 Lys Lys Asp Asn Gly Asp Thr Leu Glu Tyr Asn Gln Phe Cys Ser Lys  
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 <212> DNA  
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<211> 515
<212> PRT
<213> Glycine max

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Lys Val Lys Ile Ala Glu His Val Arg Thr Gly His Lys Val Ala Ile
      35                40                45

Lys Ile Leu Asn Arg His Lys Ile Lys Asn Met Glu Met Glu Glu Lys
      50                55                60

Val Arg Arg Glu Ile Lys Ile Leu Arg Leu Phe Met His His His Ile
      65                70                75                80

Ile Arg Leu Tyr Glu Val Val Glu Thr Pro Thr Asp Ile Tyr Val Val
      85                90                95

Met Glu Tyr Val Lys Ser Gly Glu Leu Phe Asp Tyr Ile Val Glu Lys
      100                105                110

Gly Arg Leu Gln Glu Asp Glu Ala Arg His Phe Phe Gln Gln Ile Ile
      115                120                125

Ser Gly Val Glu Tyr Cys His Arg Asn Met Val Val His Arg Asp Leu
      130                135                140

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Lys	Pro	Glu	Asn	Leu	Leu	Leu	Asp	Ser	Lys	Phe	Asn	Ile	Lys	Ile	Ala	
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Ser	Cys	Gly	Ser	Pro	Asn	Tyr	Ala	Ala	Pro	Glu	Val	Ile	Ser	Gly	Lys	
			180					185					190			
Leu	Tyr	Ala	Gly	Pro	Glu	Val	Asp	Val	Trp	Ser	Cys	Gly	Val	Ile	Leu	
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Tyr	Ala	Leu	Leu	Cys	Gly	Thr	Leu	Pro	Phe	Asp	Asp	Glu	Asn	Ile	Pro	
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Leu	Ser	Pro	Gly	Ala	Arg	Asp	Leu	Ile	Pro	Arg	Met	Leu	Val	Val	Asp	
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Gln	Gln	Ala	Lys	Lys	Ile	Asp	Glu	Glu	Ile	Leu	Gln	Glu	Val	Val	Asn	
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Ser	Gly	Phe	Asn	Arg	Met	His	Ser	Gly	Glu	Val	Ala	Ser	Pro	Val	Val	
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Gly	His	His	Ser	Thr	Gly	Tyr	Met	Asp	Tyr	Gln	Gly	Val	Gly	Met	Arg	
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Gln	Gln	Phe	Pro	Val	Glu	Arg	Lys	Trp	Ala	Leu	Gly	Leu	Gln	Ser	Arg	
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Ala	Gln	Pro	Arg	Glu	Ile	Met	Thr	Glu	Val	Leu	Lys	Ala	Leu	Gln	Glu	
				405					410					415		
Leu	Asn	Val	Cys	Trp	Lys	Lys	Ile	Gly	His	Tyr	Asn	Met	Lys	Cys	Arg	
			420					425					430			
Trp	Val	Ala	Gly	Thr	Ala	Gly	His	His	Glu	Gly	Met	Ile	Asn	Asn	Ser	
		435					440					445				
Leu	His	Ser	Asn	His	Tyr	Phe	Gly	Asn	Asp	Ser	Gly	Ile	Ile	Glu	Asn	
	450					455					460					

Glu Ala Val Ser Lys Ser Asn Val Val Lys Phe Glu Val Gln Leu Tyr  
 465 470 475 480

Lys Thr Arg Glu Glu Lys Tyr Leu Leu Asp Leu Gln Arg Val Gln Gly  
 485 490 495

Pro Gln Phe Leu Phe Leu Asp Leu Cys Ala Ala Phe Leu Ser Gln Leu  
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Arg Val Leu  
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 <213> Glycine max

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 ctctttgaca aaattgtaaa ccatggaagg atgagtgaat atgaagcacg tagatatttc 600  
 cagcagctta taaatgctgt tgattattgc catagcaggg gtgtctacca cagagacctg 660  
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 aaaaaaaaaa 1869

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 <211> 441  
 <212> PRT  
 <213> Glycine max

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Ser	Glu	Thr	Gly	Glu	Pro	Val	Ala	Leu	Lys	Ile	Leu	Asp	Lys	Glu	Lys	
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Val	Leu	Lys	His	Lys	Met	Ala	Glu	Gln	Ile	Arg	Arg	Glu	Val	Ala	Thr	
	50					55					60					
Met	Lys	Leu	Ile	Lys	His	Pro	Asn	Val	Val	Arg	Leu	Tyr	Glu	Val	Met	
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Gly	Ser	Lys	Thr	Lys	Ile	Tyr	Ile	Val	Leu	Glu	Phe	Val	Thr	Gly	Gly	
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Glu	Leu	Phe	Asp	Lys	Ile	Val	Asn	His	Gly	Arg	Met	Ser	Glu	Asn	Glu	
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Ser	Arg	Gly	Val	Tyr	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Leu	Leu	Leu	
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Ser	Gln	Gln	Val	Arg	Asp	Asp	Gly	Leu	Leu	His	Thr	Thr	Cys	Gly	Thr	
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Pro	Asn	Tyr	Val	Ala	Pro	Glu	Val	Leu	Asn	Asp	Arg	Gly	Tyr	Asp	Gly	
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Ala	Thr	Ala	Asp	Leu	Trp	Ser	Cys	Gly	Val	Ile	Leu	Phe	Val	Leu	Val	
		195					200					205				
Ala	Gly	Tyr	Leu	Pro	Phe	Asp	Asp	Pro	Asn	Leu	Met	Asn	Leu	Tyr	Lys	
	210					215					220					
Lys	Ile	Ser	Ala	Ala	Glu	Phe	Thr	Cys	Pro	Pro	Trp	Leu	Ser	Phe	Thr	
225					230					235					240	
Ala	Arg	Lys	Leu	Ile	Thr	Arg	Ile	Leu	Asp	Pro	Asp	Pro	Thr	Thr	Arg	
				245					250					255		
Ile	Thr	Ile	Pro	Glu	Ile	Leu	Asp	Asp	Glu	Trp	Phe	Lys	Lys	Glu	Tyr	
			260				265						270			
Lys	Pro	Pro	Ile	Phe	Glu	Glu	Asn	Gly	Glu	Ile	Asn	Leu	Asp	Asp	Val	
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Glu	Ala	Val	Phe	Lys	Asp	Ser	Glu	Glu	His	His	Val	Thr	Glu	Lys	Lys	
	290					295					300					
Glu	Glu	Gln	Pro	Thr	Ala	Met	Asn	Ala	Phe	Glu	Leu	Ile	Ser	Met	Ser	
305					310					315					320	
Lys	Gly	Leu	Asn	Leu	Glu	Asn	Leu	Phe	Asp	Thr	Glu	Gln	Gly	Phe	Lys	
				325					330					335		

Arg Glu Thr Arg Phe Thr Ser Lys Ser Pro Ala Asp Glu Ile Ile Asn  
340 345 350

Lys Ile Glu Glu Ala Ala Lys Pro Leu Gly Phe Asp Val Gln Lys Lys  
355 360 365

Asn Tyr Lys Met Arg Leu Ala Asn Val Lys Ala Gly Arg Lys Gly Asn  
370 375 380

Leu Asn Val Ala Thr Glu Ile Phe Gln Val Ala Pro Ser Leu His Met  
385 390 395 400

Val Glu Val Arg Lys Ala Lys Gly Asp Thr Leu Glu Phe His Lys Phe  
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Tyr Lys Lys Leu Ser Thr Ser Leu Asp Asp Val Val Trp Lys Thr Glu  
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Asp Asp Met Gln Met Arg Glu Thr Lys  
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<212> PRT  
<213> Triticum aestivum

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Ile Ala Glu His Lys His Thr Gly His Lys Val Ala Ile Lys Ile Leu  
35 40 45

Asn Arg Arg Gln Met Arg Thr Met Glu Met Glu Glu Lys Ala Lys Arg  
50 55 60

Glu Ile Lys Ile Leu Arg Leu Phe Ile His Pro His Ile Ile Arg Leu  
 65 70 75 80  
 Tyr Glu Val Ile Tyr Thr Pro Thr Asp Ile Phe Val Val Met Glu Tyr  
 85 90 95  
 Cys Lys Tyr Gly Glu Leu Phe Asp Cys Ile Val Glu Lys Gly Arg Leu  
 100 105 110  
 Gln Glu Asp Glu Ala Arg Arg Ile Phe Gln Gln Ile Ile Ser Gly Val  
 115 120 125  
 Glu Tyr Cys His Arg Asn Met Val Ala His Arg Asp Leu Lys Pro Glu  
 130 135 140  
 Asn Leu Leu Leu Asp Ser Lys Tyr Asn Val Lys Leu Ala Asp Phe Gly  
 145 150 155 160  
 Leu Ser Asn Val Met His Asp Gly His Phe Leu Lys Thr Ser Cys Gly  
 165 170 175  
 Ser Pro Asn Tyr Ala Ala Pro Glu Val Ile Ser Gly Lys Leu Tyr Ala  
 180 185 190  
 Gly Pro Glu Val Asp Val Trp Ser Cys Gly Val Ile Leu Tyr Ala Leu  
 195 200 205  
 Leu Cys Gly Thr Leu Pro Phe Asp Asp Asp Asn Ile Pro Lys Leu Phe  
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Pro Ala Arg Asp

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 <211> 2006  
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<212> PRT
<213> Triticum aestivum

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      20          25          30

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      35          40          45

Lys Ile Ala Glu His Ile Lys Thr Gly His Lys Val Ala Val Lys Ile
      50          55          60

Leu Asn Arg Arg Lys Ile Lys Asn Met Glu Met Glu Glu Lys Val Lys
      65          70          75          80

Arg Glu Ile Lys Ile Leu Arg Leu Phe Met His Pro His Ile Ile Arg
      85          90          95

Leu Tyr Glu Val Ile Glu Ala Pro Ala Asp Ile Tyr Val Val Met Glu
      100          105          110

Tyr Val Lys Ser Gly Glu Leu Phe Asp Tyr Ile Val Glu Lys Gly Arg
      115          120          125

Leu Gln Glu Glu Glu Ala Arg Arg Phe Phe Gln Gln Ile Ile Ser Gly
      130          135          140

Val Gln Tyr Cys His Arg Asn Met Val Val His Arg Asp Leu Lys Pro
      145          150          155          160

Glu Asn Leu Leu Leu Asp Asn Asn Cys Asp Val Lys Ile Ala Asp Phe
      165          170          175

Gly Leu Ser Asn Val Met Arg Asp Gly His Phe Leu Lys Thr Ser Cys
      180          185          190

Gly Ser Pro Asn Tyr Ala Ala Pro Glu Val Ile Ser Gly Lys Leu Tyr

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225					230					235					240		
Phe	Lys	Lys	Ile	Lys	Gly	Gly	Ile	Tyr	Thr	Leu	Pro	Ser	His	Leu	Ser		
				245					250					255			
Gly	Pro	Ala	Arg	Asp	Leu	Ile	Pro	Arg	Met	Leu	Val	Val	Asp	Pro	Met		
			260					265					270				
Lys	Arg	Ile	Thr	Ile	Arg	Glu	Ile	Arg	Glu	His	Pro	Trp	Phe	Glu	Ala		
		275					280					285					
Gln	Leu	Pro	Arg	Tyr	Leu	Ala	Val	Pro	Pro	Pro	Asp	Thr	Ala	Gln	Gln		
	290					295					300						
Val	Lys	Lys	Ile	Asp	Glu	Glu	Ser	Leu	Val	Lys	Val	Ile	Ser	Leu	Gly		
305					310					315					320		
Phe	Asp	Lys	Asn	Leu	Leu	Val	Glu	Ser	Ile	His	Asn	Arg	Leu	Gln	Asn		
				325					330					335			
Glu	Ala	Thr	Val	Ala	Tyr	Tyr	Leu	Phe	Leu	Asp	Asn	Lys	Ser	Arg	Thr		
			340					345					350				
Thr	Thr	Gly	Tyr	Leu	Gly	Ala	Gly	Tyr	Gln	Glu	Ala	Met	Glu	Ser	Ser		
		355					360					365					
Phe	Ser	Pro	Ile	Thr	Pro	Ser	Glu	Thr	Gln	Ser	Pro	Ala	His	Gly	Asn		
	370					375					380						
Arg	Gln	Gln	Pro	Tyr	Met	Glu	Ser	Pro	Val	Gly	Leu	Arg	Pro	His	Phe		
385					390					395					400		
Pro	Ala	Asp	Arg	Lys	Trp	Ala	Leu	Gly	Leu	Gln	Ser	Arg	Ala	His	Pro		
				405					410					415			
Arg	Glu	Val	Met	Thr	Glu	Val	Leu	Lys	Ala	Leu	Gln	Glu	Leu	Asn	Val		
			420					425					430				
Tyr	Trp	Lys	Lys	Ile	Gly	His	Tyr	Asn	Met	Lys	Cys	Arg	Trp	Ser	Pro		
		435					440					445					
Pro	Gly	Phe	Pro	Gly	Gln	Glu	Asn	Met	Asn	His	Thr	Asn	Tyr	Asn	Phe		
	450					455					460						
Ser	Ala	Glu	Pro	Ile	Glu	Thr	Asp	Asp	Leu	Gly	Asp	Lys	Leu	Asn	Leu		
465					470					475					480		
Ile	Lys	Phe	Glu	Leu	Gln	Leu	Tyr	Lys	Thr	Arg	Asp	Glu	Lys	Tyr	Leu		
				485					490					495			
Leu	Asp	Leu	Gln	Arg	Ala	Ser	Gly	Pro	His	Leu	Leu	Phe	Leu	Asp	Leu		
			500					505					510				
Cys	Ala	Ala	Phe	Leu	Ala	Gln	Leu	Arg	Val	Phe							

515 520

<210> 23  
 <211> 512  
 <212> DNA  
 <213> Zea mays

<400> 23  
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 catagaggga ggaggcgcg gggagatggt gggcggtggc ggcggcgggc cgctgcggcg 120  
 ggtgggcaag tacgaggtgg gacgcacat cggggaaggc accttcgcca aggtcaagtt 180  
 cgcgcagaac accgagaccg gggagagcgt cgccatgaag gtgctcgacc gctcctccat 240  
 cctcaagaac aagatggccg aacagattaa gagagaaata tccataatga agcttgtcag 300  
 gcatcccaat gtcgttaggc tacacgaggt tttggcaagc cggaagaaga tatttataat 360  
 tctggagttc atcactggcg gcgagctatt cgataaaatt attcgatcat ggagactcag 420  
 tgaagcagat gcccgagat actttcagca gcttattgat ggtggtgatt tttgtcacia 480  
 gaaaggagtc taccatcgag acttaaagcc tg 512

<210> 24  
 <211> 132  
 <212> PRT  
 <213> Zea mays

<400> 24  
 Arg Arg Val Gly Lys Tyr Glu Val Gly Arg Thr Ile Gly Glu Gly Thr  
 1 5 10 15  
 Phe Ala Lys Val Lys Phe Ala Gln Asn Thr Glu Thr Gly Glu Ser Val  
 20 25 30  
 Ala Met Lys Val Leu Asp Arg Ser Ser Ile Leu Lys Asn Lys Met Ala  
 35 40 45  
 Glu Gln Ile Lys Arg Glu Ile Ser Ile Met Lys Leu Val Arg His Pro  
 50 55 60  
 Asn Val Val Arg Leu His Glu Val Leu Ala Ser Arg Lys Lys Ile Phe  
 65 70 75 80  
 Ile Ile Leu Glu Phe Ile Thr Gly Gly Glu Leu Phe Asp Lys Ile Ile  
 85 90 95  
 Arg His Gly Arg Leu Ser Glu Ala Asp Ala Arg Arg Tyr Phe Gln Gln  
 100 105 110  
 Leu Ile Asp Gly Val Asp Phe Cys His Lys Lys Gly Val Tyr His Arg  
 115 120 125  
 Asp Leu Lys Pro  
 130

<210> 25  
 <211> 552  
 <212> DNA  
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<220>  
 <221> unsure  
 <222> (385)  
 <223> n = A, C, G or T

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<400> 25
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taatcaaaag ccaagacact gttcatacag ctgctcaatt atcaagccaa ccttgctcgg 120
ttccactgca gaatttcagt ttattcttat ctagctcaat tctgggttggt gggttatctc 180
ttactggaag acagactttg aggtagactc cttataagtg cgcagaagtt caagtgtaga 240
gaatgagtca gcctaagatt aaacgccgag ttggtaaata cgaggtgggg aggaccattg 300
gtgaaggtac atttgcaaag gtgaaatttg caaggaactc tgagacagga gagccgtggc 360
tcttaaaatt cttgacaagg agaangtgct aaagcacaag atggctgagc agatcaggag 420
agaagtagct acaatgaaac taatcaagca tccaaatggt gttcgattgt atgaagtcac 480
gggaagcaag acaaatatat aatgttttgg agttgtactg ggggggaacc cttgcaaatt 540
gtaaccatgg aa 552

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<210> 26
<211> 77
<212> PRT
<213> Glycine max

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<220>
<221> UNSURE
<222> (39)
<223> Xaa = ANY AMINO ACID

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Val Gly Lys Tyr Glu Val Gly Arg Thr Ile Gly Glu Gly Thr Phe Ala
 1          5          10          15

Lys Val Lys Phe Ala Arg Asn Ser Glu Thr Gly Glu Pro Trp Leu Leu
          20          25          30

Lys Phe Leu Thr Arg Arg Xaa Val Leu Lys His Lys Met Ala Glu Gln
          35          40          45

Ile Arg Arg Glu Val Ala Thr Met Lys Leu Ile Lys His Pro Asn Val
          50          55          60

Val Arg Leu Tyr Glu Val Met Gly Ser Lys Thr Asn Ile
 65          70          75

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<210> 27
<211> 391
<212> DNA
<213> Triticum aestivum

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<223> n = A, C, G or T

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<221> unsure
<222> (236)
<223> n = A, C, G or T

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<220>
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<223> n = A, C, G or T

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 <222> (297)  
 <223> n = A, C, G or T

<220>  
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 agatggagac aggccggcaaa gatggcaacc ctttgaagaa ttaccgtatt gggaagaccc 120  
 tggggattgg ttcgttcggg aaggtcaaga ttgccgagca tataaaaact ggtcacaang 180  
 tggccgtcaa gacctaatac cgccggcaaa tcaaaaacat ggcgatggaa gagaangtgn 240

caagagagat caagatatta agattattca tgcacccaca tatcatccgc ctttatnaag 300  
 tgatagaggc accagntgat atttatgtgg ntatgnanta tgtnaaagtc cggtganttg 360  
 nttgattata ntgtttctaa ngctcntata t 391

<210> 28  
 <211> 85  
 <212> PRT  
 <213> Triticum aestivum

<220>  
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 <222> (29)  
 <223> Xaa = ANY AMINO ACID

<220>  
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 <223> Xaa = ANY AMINO ACID

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 <222> (82)  
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 1 5 10 15  
 Lys Val Lys Ile Ala Glu His Ile Lys Thr Gly His Xaa Val Ala Val  
 20 25 30  
 Lys Ile Leu Asn Arg Arg Gln Ile Lys Asn Met Ala Met Glu Glu Xaa  
 35 40 45  
 Val Xaa Arg Glu Ile Lys Ile Leu Arg Leu Phe Met His Pro His Ile  
 50 55 60  
 Ile Arg Leu Tyr Xaa Val Ile Glu Ala Pro Xaa Asp Ile Tyr Val Xaa  
 65 70 75 80

Met Xaa Tyr Val Lys  
85